



Many Voices Working for the Community

Oak Ridge Site Specific Advisory Board

March 20, 2001

Mr. Rod Nelson
Assistant Manager for Environmental Management
DOE/Oak Ridge Operations
P.O. Box 2001 EM90
Oak Ridge, TN 37831

Evaluation of and Recommendations for Stewardship Requirements in Comprehensive Environmental Response, Compensation and Liability Act Documents

Dear Mr. Nelson:

The Oak Ridge Site Specific Advisory Board, at its March 14, 2001 Board meeting, approved the enclosed "Evaluation of and Recommendations for Stewardship Requirements in Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) Documents" submitted for approval by the Stewardship Committee.

The paper includes (1) a recommended statement regarding federal government commitment to stewardship, (2) a discussion of the policy basis for including stewardship in decision documents, (3) a brief discussion of scope of stewardship issues to be included in decision documents, and (4) a proposed stewardship activities table that provides the public with an overview and time frame for planned remedial actions and their associated stewardship/land use control activities.

The ORSSAB recommends that an organized approach, as suggested in this paper, to consideration of stewardship and land use control requirements in CERCLA Proposed Plans and Records of Decisions will provide the public with the information and assurance that it needs when remediation decisions result in less than complete cleanup of the Reservation.

We look forward to receiving your written response.

Sincerely,

A handwritten signature in black ink that reads "Luther V. Gibson, Jr.".

Luther V. Gibson, Jr.
Chair

Enclosure

Cc: Pat Halsey, DOE/ORO, Connie Jones, EPA Region 4, John Owsley, TDEC,
Ralph Skinner, DOE/ORO



Evaluation of and Recommendations for Stewardship Requirements in Comprehensive Environmental Response, Compensation and Liability Act Documents

ISSUE

CERCLA¹ decision documents for the Oak Ridge Reservation do not adequately describe stewardship requirements for those areas on the Reservation that will remain contaminated following remediation.

BACKGROUND

The Stewardship Committee of the Oak Ridge Site Specific Advisory Board reviewed the stewardship sections of the following recent CERCLA documents:

1. Record of Decision for the K-1070-a Burial Ground, East Tennessee Technology Park, Oak Ridge, Tennessee (DOE/OR/01-1734&D3)
2. Record of Decision for the Phase I Activities in Bear Creek Valley at the Oak Ridge Y-12 Plant, Oak Ridge, Tennessee (DOE/OR/01-1705&D3)
3. Record of Decision for the Disposal of Oak Ridge Reservation Comprehensive Environmental Response, Compensation and Liability Act of 1980 Waste, Oak Ridge, Tennessee (DOE/OR/01-1791&D3)
4. Record of Decision for the Melton Valley Watershed at the Oak Ridge National Laboratory, Oak Ridge, Tennessee (DOE/OR/01-1826&D1)
5. Proposed Plan for Interim Actions in Bethel Valley, Oak Ridge, Tennessee (DOE/OR/01-1795&D2)
6. Proposed Plan for Interim Source Control Actions for Contaminated Soils, Sediments, and Groundwater (Outfall 51) which Contribute Mercury and PCB-Contamination to Surface Water in the Upper East Fork Poplar Creek Characterization Area, Oak Ridge, Tennessee (DOE/OR/01-1839&D2)

¹Comprehensive Environmental Response, Compensation, and Liability Act of 1980.

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The objective of the review was to determine the adequacy of the stewardship sections with regard to the recommendations made in the *Oak Ridge Reservation Stakeholder Reports on Stewardship*², the “Community Guidelines for Determining End Uses of Contaminated Land and Water on the Oak Ridge Reservation” published in the *Final Report of the Oak Ridge Reservation End Use Working Group*³, The Oak Ridge Reservation Land Use Control Assurance Plan⁴, and other Site Specific Advisory Board Recommendations and Comments on Stewardship Requirements in CERCLA Documents.⁵

PURPOSE

Since 1997, Oak Ridge area stakeholders have taken a keen interest in stewardship requirements for remedial actions on the Oak Ridge Reservation. This interest stems from the belief that stewardship is the most important element in any remedial decision, as it is potentially its weakest link. Failure of stewardship will, in many cases, result in failure of the remedy to maintain overall protection of human health and the environment. Oak Ridge stakeholders cannot accept any decision that leaves waste material or residual contamination in place, unless we can be assured that reliable measures are available to ensure that the remedy put in place will remain protective of human health and the environment for as long as the waste material or residual contamination remains a threat. As such, the evaluation of alternatives must adequately consider all needed stewardship actions and costs, and the final decision must clearly demonstrate an understanding of those stewardship actions necessary for protection of human health and the environment.

The Oak Ridge Site Specific Advisory Board does not believe that the remedy selection process currently being conducted on the Reservation is giving adequate consideration to stewardship issues. The Records of Decision currently being signed do not provide full understanding of the stewardship requirements for selected remedies. While we recognize that the Records of Decision that have been signed to date address only parts of the total remediation within a given watershed, the remedies selected generally represent the final action for the source areas being addressed. As such, a thorough evaluation and description of stewardship requirements is warranted.

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²The Oak Ridge Stakeholder Report on Stewardship, July 1998; The Oak Ridge Stakeholder Report on Stewardship, Volume 2, December 1999.

³Final Report of the Oak Ridge Reservations End Use Working Group, July 1998.

⁴Department of Energy, Oak Ridge Reservation Land Use Control Assurance Plan and Memorandum of Understanding, November 1999.

⁵Oak Ridge Site Specific Advisory Board, Recommendations and Comments on Stewardship Requirements in CERCLA Documents, submitted to DOE-ORO on July 6, 2000.

The Department of Energy (DOE) has made progress in incorporating stewardship issues into Records of Decision, but we believe more needs to be done. The goal of this paper is to call to DOE's attention the basic stewardship information that we believe is needed to make informed decisions about remedial action alternatives and to meet the remedial action objectives that are set forth in all CERCLA decision documents.

To that end, this paper includes (1) a recommended statement regarding federal government commitment to stewardship, (2) a discussion of the policy basis for including stewardship in decision documents, (3) a brief discussion of scope of stewardship issues to be included in decision documents, and (4) a proposed stewardship activities table that provides the public with an overview and time frame for planned remedial actions and their associated stewardship/land use control activities.

FEDERAL COMMITMENT TO STEWARDSHIP

In 1980, when CERCLA was enacted, the goal was cleanup of contaminated sites to levels that allow for unlimited use and unrestricted exposure. In the ensuing years, it has become obvious that often such cleanup is not possible for reasons related to technology, safety, and budget, and that communities will have to come to terms with waste disposal sites closed in place and broad areas with residual contamination. Neither CERCLA nor the other federal acts/regulations substantively address this issue.

Thus, stakeholders have led the way to filling this void by insisting that stewardship be a part of federal agency planning for remediation of contaminated areas. Because stewardship is, in most cases, a very long term activity, a general statement describing the responsibility for, the elements of, and funding for stewardship must be written into legally enforceable decision documents so that future generations will understand and have recourse if the federal government reneges on its obligation to protect human health and the environment.

We recommend inclusion of the following stewardship commitment statement in CERCLA Proposed Plans, Records of Decision, and Action Memoranda in order to provide the overall assurance that the public seeks from the DOE:

Radioactive and hazardous contaminants will remain in the _____ following the remedial actions described in the Proposed Plan and subsequent Record of Decision. This residual contamination will require monitoring, maintenance of containment structures, land use controls, and restriction of access for _____ years, in order to protect the public's health and the environment. The implementation and funding of these activities is acknowledged to be the responsibility of the federal government, through its designated contractors or agents, until the hazards and risk are negligible. The federal government will provide for public involvement in the oversight of stewardship and land use control activities by supporting a citizens' group and by ensuring public input to all CERCLA documents and subsequent reviews of contaminated areas until the site is suitable for unrestricted use.

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POLICY BASIS FOR INCLUDING STEWARDSHIP IN DECISION DOCUMENTS

When remediation depends on stewardship and land use controls, we recommend that analysis of the remedial action alternatives include, at a minimum, the strategies set out in the Oak Ridge Reservation Land Use Control Assurance Plan (LUCAP) and Memorandum of Understanding⁶, and the Environmental Protection Agency (EPA) Region 4 Land Use Controls policy⁷. We understand that watershed- or reservation-wide stewardship will be addressed at some future time when remediation is complete, but in the meantime, the partial remedial actions are final for specific units. Thus, we believe that it is appropriate and necessary during the remedy selection process to factor stewardship responsibilities, sources, and funding into the technical feasibility analyses of the remedial action alternatives. We also understand and accept that unit-specific details for land use controls (e.g., methods and mechanisms for monitoring and field inspections) will be determined and described in post-Record of Decision documents such as Remedial Design Work Plans.

While the signatories to the Oak Ridge Reservation Federal Facility Agreement (i.e., DOE, EPA Region 4, and the Tennessee Department of Environment and Conservation) acknowledge that the LUCAP "...does not carry the force of law as is established through rulemaking," we believe that inclusion of LUCAP requirements in the legally enforceable CERCLA Proposed Plans, Records of Decision and Action Memoranda will provide current and future generations with recourse to the courts if stewardship is compromised.

The LUCAP requires an analysis of the ability to implement land use controls at **an early stage of the remedy selection process**. Furthermore it states that an **adequate description of land use controls along with conditions for their use** should be included **in the appropriate decision documents** (i.e., Proposed Plans, Records of Decision, Resource Conservation and Recovery Act permits). The description should include sufficient detail to allow evaluation under the remedy selection criteria contained in CERCLA and the National Contingency Plan.

SCOPE OF STEWARDSHIP ISSUES TO BE INCLUDED IN DECISION DOCUMENTS

Appendix C of the LUCAP provides examples of language for inclusion in decision documents that specify land use controls as part of the selected remedy as agreed to by the signatories of the Memorandum of Understanding. Much of Appendix C is devoted to language in Records of

⁶Memorandum of Understanding for Implementation of a Land Use Control Assurance Plan (LUCAP) for the United States Department of Energy Oak Ridge Reservation, November 1999.

⁷United States Environmental Protection Agency, Region 4, Assuring Land Use Controls at Federal Facilities, April 21, 1998.

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Decisions and preferred alternatives. We recommend that it be applied at the Proposed Plan stage so that the public has an opportunity to understand and comment on DOE's plans for stewardship and land use controls. The following is a summary of the items listed in Appendix C that we recommend be addressed in CERCLA Proposed Plans:

- remedial action objectives,
- land use control objectives necessary to ensure the protectiveness of the preferred alternative,
- current and anticipated future land use,
- limitations on future land use,
- types of controls and restrictions that will be implemented to achieve the land use control objectives,
- institutional controls selected to prevent unauthorized exposure to the contaminated media,
- a description of the boundary to which land use controls apply,
- if applicable, a description of deed restrictions, and
- a schedule for issuance and review of land use control implementation plans.

In addition, we recommend that CERCLA decision documents clearly identify roles and responsibilities for implementing stewardship activities.

STEWARDSHIP OVERVIEW TABLE

Furthermore, we recommend that a summary table of stewardship activities for the preferred alternative be a part of each Proposed Plan and Record of Decision. (See attached example). Much of the information for such a table is available at the time of decision making, but is not included in the decision documents. Information which is not available can then be determined or identified as unavailable at the time. Providing this type of overview will assist stakeholders and decision makers to understand both the stewardship needs and the importance of stewardship in the long term implementation of the overall remedy.

CONCLUSION

The Oak Ridge Site Specific Advisory Board recommends that an organized approach, as suggested in this paper, to consideration of stewardship and land use control requirements in CERCLA Proposed Plans and Records of Decision will provide the public with the information and assurance that it needs when remediation decisions result in less than complete cleanup of the Reservation.

OAK RIDGE RESERVATION STEWARDSHIP ACTIVITIES TABLE

UPPER EAST FORK POPLAR CREEK SOURCE CONTROL ACTIONS

Remedial Project (corrective action unit)	Remedial Actions to be taken	Remedial Action Start Date	Stew. Start Date/ Duration	Stewardship/Land Use Control Objectives	Stewardship/Land Use Control Actions Required to Meet Objectives	Monitoring and Review Frequency	Projected Stewardship Costs
Hydraulic isolation of West End Mercury area and water treatment for mercury	<ul style="list-style-type: none"> Asphalt caps over mercury runoff areas Flush/reline/replace storm sewers Dispose 100 yards soil and 350 yards sediment Carbon treat mercury from Outfall 51 	~2004	~2007 soils not clear how long water treatment will be necessary stew. is perpetual	Protect surface water recreational user	Surface and ground water sampling, signs, weekly patrols, and deed restrictions to limit access to source areas	<ul style="list-style-type: none"> Quarterly sampling of surface water Review remedy every 5 years 	Total annual O&M costs est. at \$1.4 million Individual stew. costs not available
				Maintain caps in working order	Quarterly inspections, regular cap upgrades		
				Restrict access to capped areas	Fences to limit access to cap areas		
				Restrict ability to disturb soils	Deed restrictions to limit ownership and development		
Sediment removal from UEFPC and Lake Reality	<ul style="list-style-type: none"> Remove ~4000 yards from UEFPC Remove ~8000 yards from Lake Reality 70% disposal in EMWMF 70% disposal off site 	~2007	~2011 stew. is perpetual	Protect surface water recreational user	Surface water sampling, signs, weekly patrols, and deed restrictions to limit access to source areas	<ul style="list-style-type: none"> Quarterly sampling of surface water Review remedy every 5 years 	Individual stew. costs not available